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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,932	04/26/2001	Erin H. Sibley	PD-201027A	2067

7590 03/02/2006

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EXAMINER

USTARIS, JOSEPH G

ART UNIT PAPER NUMBER

2617

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/844,932	Applicant(s) SIBLEY, ERIN H.	
	Examiner Joseph G. Ustaris	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment dated 21 December 2005 in application 09/844,932. Claims 1-15 are pending. No claims are amended.

Information Disclosure Statement

2. The information disclosure statements filed 29 December 2005 and 26 January 2006 fails to comply with 37 CFR 1.97(c) because it lacks the fee set forth in 37 CFR 1.17(p). It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claims 1 and 13, the specification discloses inserting a digital video stream within a vertical blanking interval in paragraph 0047 and Figs. 4 and 5. However,

in the broadcast television art, the vertical blanking interval does not have sufficient bandwidth to carry a video stream. The specification merely discloses using MPEG4 (or other suitable video compression software) to compress the video stream to fit inside the relatively small bandwidth of the vertical blanking interval. It is not clear how this is done; the specification provides no additional details regarding what structure would actually be able to accomplish this. It is unclear how one with ordinary skill in the art would insert a digital video stream within the vertical blanking interval. As best understood from the specification, the examiner will read "digital video stream" as graphics or still video images.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 7 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Shintani et al. (US006661472B2).

Regarding claim 7, Shintani et al. (Shintani) discloses a digital television or "portable user appliance", where inherently the digital television is easily movable or "portable" (See Fig. 1b). The digital television receives "a digital video stream

embedded in excess bandwidth of an over-the-air digital broadcast television signal” (See column 1 lines 1-29), where a standard 6 MHz channel within the frequency spectrum or “over-the-air digital broadcast television signal” has “excess bandwidth” in order to carry extra “digital video streams”. The digital television includes a “television tuner receiving the over-the-air digital broadcast signal” (See Fig. 1b, tuner 160; column 4 lines 24-30), where the tuner also serves as the “excess bandwidth frame grabber for receiving the digital video stream”. The digital television also includes a channel processing circuit or “a digital decompressor for decompressing said digital video stream into a decompressed video stream” (See Fig. 1b, channel processing circuit 170; column 4 lines 24-43) and a “display displaying the decompressed video stream” (See Fig. 1b, display 155; column 4 lines 42-43).

Claim 15 contains the limitations of claim 7 and is analyzed as previously discussed with respect to that claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US006556248B1) in view of Freeman et al. (US 20020129374A1).

Regarding claim 1, Kim discloses a general TV receiving apparatus or “portable user appliance”, where inherently the TV receiving apparatus is easily movable or “portable” (See Fig. 3). The TV receiving apparatus is able to receive HTML image and audio data or “digital video stream” this is “embedded in a vertical blanking interval of a broadcast television signal” (See Fig. 3; column 5 lines 6-31). The TV receiving apparatus includes a “television tuner for receiving the over-the-air broadcast signal” (See Fig. 3, tuner 11 and ANT; column 2 lines 48-57), a “vertical blanking interval frame grabber for receiving the digital video stream” (See Fig. 3, tuner 100 and TV decoder 103; column 5 lines 1-14), and a “display displaying the video stream” (See Fig. 3, CRT; column 5 lines 15-18). However, Kim does not disclose a “digital decompressor for decompressing said digital video stream into a decompressed video stream”.

Freeman et al. (Freeman) discloses a system for transmitting digital data (e.g. video images and audio). Freeman discloses that the data is compress and then decompressed/decoded at the receiver or “digital decompressor for decompressing said digital video stream into a decompressed video stream” (See Figs. 2 and 3, compressors 3 and decompressor/decoder 110; paragraphs 0050, 0053-0054). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the system and HTML decoder disclosed by Kim to compress the data transmitted over the system and for the HTML decoder to decompress the compressed data, as taught by Freeman, in order to reduce the data transfer requirements thereby using the available bandwidth more efficiently.

Claim 13 contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim.

Claims 2, 3, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US006556248B1) in view of Freeman et al. (US 20020129374A1) as applied to claims 1 and 13 above, and further in view of Cho (US005760848A).

Regarding claim 2, Kim in view of Freeman does not disclose a "cradle receiving said portable user appliance".

Cho discloses a video monitor or "portable user appliance" that can be used as a television receiver (See Fig. 2, column 1 lines 50-62). The video monitor includes a body apparatus or "cradle", where the video monitor can be docked with the body apparatus (See Fig. 2, video monitor 20 and body apparatus 10). Furthermore, the body apparatus is coupled to the antenna or "first antenna" of the video monitor (See Fig. 2). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the TV receiving apparatus disclosed by Kim in view of Freeman to include a cradle that "receives the portable user appliance" and is coupled to the antenna, as taught by Cho, in order to provide an easy means of connecting and disconnecting cables and various other sources to the TV receiving apparatus thereby making the system more convenient for the user.

Regarding claim 3, the body apparatus is also disposed within an automotive vehicle (See Cho column 4 line 63 – column 5 line 18).

Claim 14 contains the limitations of claims 3 and 13 (wherein the antenna of the video monitor is also the "automobile antenna" since it's the antenna that receives television signal within the automobile) and is analyzed as previously discussed with respect to those claims.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US006556248B1) in view of Freeman et al. (US 20020129374A1) and in further view of Cho (US005760848A) as applied to claims 2, 3, and 14 above, and further in view of Rudolph (US005949498A).

Kim in view of Freeman and in further view of Cho does not disclose a "second antenna" and a "control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device".

Rudolph discloses a diversity antenna system for receiving television signals. The system includes multiple antennas or "second antenna" (See Fig. 2, antennas 9) and a "control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device" (See Fig. 2, antennas 9, diversity control 8, comparator 10, change-over switch 6; column 1 lines 10-25 and column 3 lines 40-67). Therefore it would have been obvious to one with ordinary skill in the art at

the time the invention was made to modify TV receiving apparatus disclosed by Kim in view of Freeman and in further view of Cho to include a "second antenna" and a "control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device", as taught by Rudolph, in order to ensure that the best possible signal is being received thereby ensuring higher quality video/audio signals.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US006556248B1) in view of Freeman et al. (US 20020129374A1) as applied to claims 1 and 13 above, and further in view of Leermakers (US 20030105845A1).

Kim in view of Freeman does not disclose that the TV receiving apparatus is embodied as a "personal digital assistant".

Leermakers discloses personal multimedia appliances that can receive programs over various air or cable broadcast systems. The personal multimedia appliances take the form of "personal digital assistant" that includes a tuner and display (See Fig. 2; paragraph 0011 and 0024). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the TV receiving apparatus disclosed by Kim in view of Freeman to be embodied as a "personal digital assistant", as taught by Leermakers, in order to provide an appliance that is easier to carry around in a bag or pocket of the user.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US006556248B1) in view of Freeman et al. (US 20020129374A1) as applied to claims 1 and 13 above, and further in view of Yang (US006529742B1).

Kim in view of Freeman does not disclose that the TV receiving apparatus is embodied as a "cellular phone".

Yang discloses a cellular phone that is capable of receiving television signals. The cellular phone includes a TV tuner that is able to receive television programs and display the programs on the display (See Fig. 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the TV receiving apparatus disclosed by Kim in view of Freeman to be embodied as a "cellular phone", as taught by Yang, in order to provide an appliance that is easier to carry around in a bag or pocket of the user and that provides multiple functions, e.g. TV and phone.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al. (US006661472B2) in view of Cho (US005760848A).

Claim 8 contains the limitations of claim 7 and is analyzed as previously discussed with respect to that claim. However, Shintani does not disclose a "cradle receiving said portable user appliance".

Cho discloses a video monitor or "portable user appliance" that can be used as a television receiver (See Fig. 2, column 1 lines 50-62). The video monitor includes a

body apparatus or "cradle", where the video monitor can be docked with the body apparatus (See Fig. 2, video monitor 20 and body apparatus 10). Furthermore, the body apparatus is coupled to the antenna or "first antenna" of the video monitor (See Fig. 2). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the digital television disclosed by Shintani to include a cradle that "receives the portable user appliance" and is coupled to the antenna, as taught by Cho, in order to provide an easy means of connecting and disconnecting cables and various other sources to the TV receiving apparatus thereby making the system more convenient for the user.

Regarding claim 9, the body apparatus is also disposed within an automotive vehicle (See Cho column 4 line 63 – column 5 line 18).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al. (US006661472B2) in view of Cho (US005760848A) as applied to claims 8 and 9 above, and further in view of Rudolph (US005949498A).

Shintani in view of Cho does not disclose a "second antenna" and a "control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device".

Rudolph discloses a diversity antenna system for receiving television signals. The system includes multiple antennas or "second antenna" (See Fig. 2, antennas 9)

and a “control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device” (See Fig. 2, antennas 9, diversity control 8, comparator 10, change-over switch 6; column 1 lines 10-25 and column 3 lines 40-67). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify digital television disclosed by Shintani in view of Cho to include a “second antenna” and a “control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device”, as taught by Rudolph, in order to ensure that the best possible signal is being received thereby ensuring higher quality video/audio signals.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al. (US006661472B2) in view of Cho (US005760848A) and in further view of Rudolph (US005949498A) as applied to claim 10 above, and further in view of Leermakers (US 20030105845A1).

Shintani in view of Cho and in further view of Rudolph does not disclose that the digital television is embodied as a “personal digital assistant”.

Leermakers discloses personal multimedia appliances that can receive programs over various air or cable broadcast systems. The personal multimedia appliances take

the form of “personal digital assistant” that includes a tuner and display (See Fig. 2; paragraph 0011 and 0024). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the digital television disclosed by Shintani in view of Cho and in further view of Rudolph to be embodied as a “personal digital assistant”, as taught by Leermakers, in order to provide an appliance that is easier to carry around in a bag or pocket of the user.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al. (US006661472B2) in view of Yang (US006529742B1).

Claim 12 contains the limitations of claim 7 and is analyzed as previously discussed with respect to that claim. However, Shintani does not disclose that the digital television is embodied as a “cellular phone”.

Yang discloses a cellular phone that is capable of receiving television signals. The cellular phone includes a TV tuner that is able to receive television programs and display the programs on the display (See Fig. 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the digital television disclosed by Shintani to be embodied as a “cellular phone”, as taught by Yang, in order to provide an appliance that is easier to carry around in a bag or pocket of the user and that provides multiple functions, e.g. TV and phone.

Response to Arguments

6. Applicant's arguments filed 21 December 2005 have been fully considered but they are not persuasive.

Applicant argues with respect to the 35 U.S.C. 112, first paragraph, rejection of claims 1 and 13 that there is sufficient disclosure to enable one skilled in the art to practice the invention. It is noted that it is well known in the art to impose a digital signal on an analog signal. However, claims 1 and 13 recite receiving a digital *video* stream within the vertical blanking interval. Despite the explanation of the frame grabber software and how it is well known to impose a digital signal on an analog signal, it still does not disclose how a digital *video* stream fits inside the relatively small bandwidth of the vertical blanking interval.

Applicant further argues with respect to claims 7-12 and 15 that Shintani fails to disclose excess bandwidth for carrying a digital video stream. However, reading the claims in the broadest sense, Shintani does meet the limitations of the claims. Shintani discloses a digital broadcast system that is implemented over a conventional analog broadcast system. A single physical channel represents one 6 MHz channel, where in the analog case, one analog signal is carried in the 6 MHz channel. However, in the digital case, that one 6 MHz physical channel has "excess bandwidth" to carry more than one digital stream or virtual channels. Shintani discloses that the single physical channel can include multiple virtual channels (See column 1 lines 18-29).

Applicant also argues with respect to claims 1-6, 13, and 14 that Kim does not disclose a vertical blanking interval grabber. However, reading the claims in the

broadest sense, Kim does disclose the limitations recited in the claims. Kim discloses that the HTML data signal is transmitted in the vertical blanking interval (VBI). Kim also discloses a TV tuner and TV decoder that serve the function of the "vertical blanking interval frame grabber", wherein the TV tuner and TV decoder receive the HTML data signal from the VBI and extracts the HTML data signal in order to provide the signal to the HTML decoder (See Fig. 3; column 5 lines 1-14).

Applicant further argues with respect to claims 1-6, 13, and 14 that Kim in view of Freeman does not disclose a digital decompressor for decompressing a compressed digital signal in the VBI. Furthermore, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Kim discloses that HTML data signals are transmitted in the VBI. Freeman discloses a system that is able to compress/decompress signals in a video communications system in order to reduce the data transfer requirements thereby using the available bandwidth more efficiently (See Freeman paragraph 0050). Therefore, the combination of Kim in view of Freeman would compress the HTML data signals at the

transmitter and decompress the HTML data signals at the receiver, wherein the HTML data signals are transmitted within the VBI.

Applicant also argues with respect to claim 14 that Cho does not disclose an automobile antenna. However, reading the claim in the broadest sense, Kim in view of Freeman and in further view of Cho does meet the limitations of the claims. Cho discloses that the unit is connected to the automobile thereby making the unit part of the automobile (See Cho column 5 lines 1-8). The antenna is then used to receive television broadcasts.

Applicant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

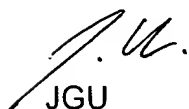
Art Unit: 2617

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph G. Ustaris whose telephone number is 571-272-7383. The examiner can normally be reached on M-F 7:30-5PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JGU

February 27, 2006



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